

REMARKS

In the January 9, 2006 Final Office Action, claims 1-18 were rejected. This Response amends claims 1, 9, and 11 and cancels claim 10 to focus the Office on limitations that were previously recited in dependent claim 10. After entry of the foregoing amendments, claims 1-9 and 11-18 (17 total claims; 2 independent claims) remain pending in the application. Reconsideration of the application is respectfully requested in view of the above amendments and the following remarks.

As an initial matter, Applicant respectfully requests the Office to reconsider and withdraw the finality of the January 9, 2006 Office Action. The January 9, 2006 Office Action did not specifically address then-pending claims 9, 10, or 16, which were believed to be allowable over the prior art of record. In an attempt to expedite prosecution of the application, Applicant has amended independent claims 1 and 11 such that they now include the limitation previously recited in claim 10. Applicant also amended claim 9 to make it consistent with the amended language of claim 1. No new matter has been introduced and the above amendments are intended to direct the Office to the previously claimed subject matter that was not specifically addressed in the January 9, 2006 Office Action. Accordingly, Applicant seeks to have the finality of the January 9, 2006 Office Action withdrawn to enable the above amendments to be entered and considered by the Office.

Drawings

Replacement sheets with amended FIG. 2 and amended FIG. 3 are being submitted herewith for consideration by the Office. Applicant requests the withdrawal of the objection to the drawings in view of these amended sheets.

§103 Rejections

Claims 1-9 and 11-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over allegedly admitted prior art in view of Wycech, USPN 6,287,666 (hereinafter "Wycech"), claims 1, 2, 4-9, and 11-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sutherland, USPN 6,723,012 (hereinafter "Sutherland") in view of Wycech, and claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sutherland in view of Wycech and further in view of Filice et al., USPN 6,334,824 (hereinafter "Filice"). Applicant respectfully traverses these rejections.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify a reference or to combine the teachings of multiple references. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all of the recited claim limitations. Of course, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. Applicant respectfully submits that the Examiner has not met all of the above criteria.

Regarding the rejection of claims 1-9 and 11-18 over the allegedly admitted prior art in view of Wycech, the proposed combination does not teach or suggest each and every element of independent claim 1 or independent claim 11. In particular, this proposed combination does not teach or suggest a foam-to-solid interface that forms a bullnose shape having two different radii. In other words, Applicant's claimed invention would not result from the proposed combination.

Furthermore, Applicant respectfully disagrees with the conclusion that one skilled in the art would look to Wycech as a source of motivation to address the shortcomings of the prior art in the manner recited in Applicant's claims. As mentioned in Applicant's last response, Wycech is directed to a channel-shaped structural member (e.g., for a vehicle bumper) designed to withstand side impacts and to resist bending about its longitudinal axis. Foam is located within the channel structure to provide increased stiffness and resistance to bending. Wycech employs an inner shell that is arched in a direction opposite that of the force to which the bumper is subjected (Column 2, Lines 31-36). This is clearly depicted in FIGS. 1-2 of Wycech. In contrast, a structure embodying Applicant's invention utilizes the solid section for attachment to another structure because the composite section may not be suitable for such attachment. In other words, Applicant's non-solid composite section is not intended to withstand side impacts (which is a critical function of the vehicle bumper disclosed by Wycech). Moreover, Applicant's invention addresses the issue of delamination or cracking of the internal foam-solid interface, while Wycech is specifically directed to the problem of increased structural strength and resistance to bending of the bumper itself (contrary to the statement made in the Office Action, Wycech is not related to "the formation of the curved surface at the interface section to reduce the stress"). Again, one skilled in the art would not look to the teaching of Wycech to

provide features suitable for incorporation into a composite structural material as claimed by Applicant. Thus, there is no suggestion or motivation to form the proposed combination.

For at least the above reasons, claims 1-9 and 11-18 are not unpatentable over the allegedly admitted prior art in view of Wycech, and Applicant requests the withdrawal of the associated §103 rejection.

Regarding the rejection of claims 1, 2, 4-9, and 11-18 (over Sutherland in view of Wycech), the proposed combination does not teach or suggest each and every element of independent claim 1 or independent claim 11. In particular, this proposed combination does not teach or suggest a foam-to-solid interface that forms a bullnose shape having two different radii. In other words, Applicant's claimed invention would not result from the proposed combination. Moreover, Applicant reiterates that there is no reasonable suggestion or motivation to combine Sutherland with Wycech, for the reasons set forth in Applicant's Response dated September 30, 2005.

For at least the above reasons, claims 1, 2, 4-9, and 11-18 are not unpatentable over Sutherland in view of Wycech, and Applicant requests the withdrawal of the associated §103 rejection.

Regarding the rejection of claim 3 (over Sutherland in view of Wycech and Filice), the proposed combination does not teach or suggest each and every element of independent claim 1 or independent claim 11. In particular, this proposed combination does not teach or suggest a foam-to-solid interface that forms a bullnose shape having two different radii. In other words, Applicant's claimed invention would not result from the proposed combination. Moreover, Applicant reiterates that there is no reasonable suggestion or motivation to combine Sutherland with Wycech and Filice, for the reasons set forth in Applicant's Response dated September 30, 2005.

For at least the above reasons, claim 3 is not unpatentable over Sutherland in view of Wycech and Filice, and Applicant requests the withdrawal of the associated §103 rejection.

In conclusion, for the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact the undersigned attorney at (480) 385-5060.


Appl. No. 10/686,065
Reply to Office Action of January 9, 2006

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: MARCH 9, 2006

By: 
Mark M. Takahashi
Reg. No. 38,631
(480) 385-5060